

Department of Energy

Savannah River Operations Office P.O. Box A Aiken, South Carolina 29802 JUN 1 4 1989

Mr. Ambrose L. Schwallie, President Westinghouse Savannah River Company Aiken, SC 29808

Dear Mr. Schwallie:

SUBJECT Award Fee Determination for October 1, 1998, through March 31, 1999, Award Fee Period 5 of Contract Number DE-AC09-96SR18500

I have completed my evaluation of the Westinghouse Savannah River Company (WSRC) contract performance and determined your award fee based on:

- 1. Assessment of performance of work in accordance with the Annual Operating Plan (AOP) for each of the six business areas of High Level Waste, Nuclear Materials Management and Nonproliferation, Solid Waste, Environmental Restoration, Tritium, and Operational Support Programs;
- 2. Integrated evaluation of the performance of all work relative to the five SRS Focus Areas of safety; technical capability and performance; community, state, and regulator relationships; cost effectiveness; and corporate perspective; and
- 3. The fact that WSRC met the minimum requirements for payment of fee pursuant to Contract Clause H.8.

As the Fee Determination Official for the Savannah River Operations Office, I am writing to inform you that WSRC earned \$17,666,000 of the available \$20,725,000. Overall, and as measured using established rating criteria, WSRC demonstrated a strong level of performance this period in accomplishment of AOP milestones and in fulfillment of expectations within the Site Focus Areas as described below. I do expect, however, WSRC to place renewed management attention and emphasis on those areas of weakness which are described below.

HIGH LEVEL WASTE

During this period, the High Level Waste (HLW) program exceeded expectations of work as outlined in the AOP. In addition to substantially exceeding canister production goals (separately incentivized as a PBI), W3RC also increased H-Evaporator availability, implemented significantly improved safety documentation, and safely received, stored, and transferred material throughout the HLW System. With respect to the evaluation of options as alternatives to the In-Tank Precipitation (ITP) project, I recognize that the suspension of the ITP project occurred in February of 1998, and this issue was addressed in Award Fee Period 3. This past failure has been deemed inexcusable and has had a significant negative impact on our ability to effectively accomplish the full scope of the HLW Program and on the credibility of the site and the Department. My assessment of work conducted this current evaluation period, however, reflects that a disciplined and well-managed evaluation process is now being executed to ensure a workable alternative technology or process will be selected for future salt disposition activities. This assessment conclusion has also been independently validated.

Implementation of upgraded safety documentation including Technical Safety Requirements within the H-Tank Farm is a significant improvement relative to ensuring safe operation within the safety envelope. This is attributed to improved procedures and controls that will drive consistent interpretations and implementation.

Many Y2K systems were completed ahead of schedule with implementation showing minimal impact to operations. During the period, 62 HLW Mission Essential Systems and 25 Non-Mission Essential Systems were completed, with 77 of the total completed ahead of schedule. In many cases, WSRC was able to identify more efficient methods to make the Y2K fixes or were able to install temporary equipment modifications that allowed partial or complete facility operations while the fixes were implemented. This resulted in both improved facility availability and higher productivity than initially forecast. For example, the DWPF Canister Decontamination Cell programmable logic controller replacement was completed per facility schedule and under the estimated installation cost.

DWPF and the H-Evaporator both achieved significantly improved facility availability over last period. DWPF achieved an availability of 89% during the second quarter of the period and the H-Evaporator achieved an 80% availability. Several challenges were experienced early in the period that had the potential to seriously disrupt facility operations. Largely due to extensive involvement by the facility and senior management, these issues were addressed quickly and not allowed to linger unresolved. Examples include:

- the recognition of high tritium levels in the wastes being processed through the F-Area Evaporator and initial feed material to the Replacement High Level Waste Evaporator;
- pluggage problems encountered on the H-Evaporator material removal systems; and
- the material chemistry problems encountered during the transition to the second DWPF feed batch.

While these accomplishments highlight a few of the areas in which the HLW system has excelled, several weaknesses exist in the HLW program. Both Replacement Evaporator Startup and Waste Removal Project activities continue to require increased management attention in order to be successful. Additionally, while both CIF and F-Evaporator facilities dealt admirably with unexpected challenges, their availability remained below expectations for the third period in a row.

NUCLEAR MATERIALS MANAGEMENT AND NONPROLIFERATION

WSRC execution of nuclear materials management and non-proliferation activities exceeded expectations when compared against the Annual Operating Plan. All 28 milestones scheduled for completion in Period 5 were completed on or ahead of schedule. In addition, 8 milestones scheduled for Period 6 completion were accomplished early during period 5. Noteworthy achievements included: completion of nuclear sweepings stabilization ahead of schedule,

completion of work in K and L Reactor Areas to meet the requirements of the Phytonium Production Reactor Agreement, transport and receipt of foreign fuel shipments from Southeast Asia and South America as part of the DOE non-proliferation program, innovative planning to accommodate early nuclear material stabilization in F-Canyon, timely maintenance actions for the H-Canyon hot crane, outstanding efforts to enhance the DOE integration of nuclear materials management across the complex, and timely completion of modifications to the K Area to support EM efforts to remove nuclear materials from Rocky Flats at the earliest time. An area of concern is the delay in the certification of the 9975 shipping container needed to support shipments of nuclear materials from Rocky Flats. Focused management attention is needed to make progress in achieving the certification for the 2275 container.

Improvement was observed in correcting weak project management direction noted in the last period. This included improved technology development for vitrification of Americium and Curium in F-Canyon, timely actions to minimize costs for suspension of construction of the Actinide Packaging and Storage Facility, implementation of actions to upgrade systems for Y2K compliance, and planning and execution of the K-Area Materials Storage project.

WSRC has continued to provide DOE strong support for interactions with the Defense Nuclear Facilities Safety Board (DNFSB), the Citizens Advisory Board, and state government officials. DNFSB took note of the significant assistance provided by WSRC in the DOE-Complex Nuclear Material Integration offorts.

WSRC did not take sufficient action to improve weaknesses noted in the previous period in conduct of operations for the Spent Fuel Storage Division. A slowdown in work was necessitated to make requisite improvements at the end of Period 5. WSRC did respond in a positive manner to apply lessons learned in other program areas to establish an improvement plan and did upgrade management attention to conduct of operations to ensure the plan's success.

SOLID WASTE

WSRC demonstrated excellent performance in the transuranic (TRU) waste drum retrieval program by finishing retrieval operations on Pads 2 and 3, and venting and purging 2,125 drums containing TRU waste to stay more than one year ahead of schedule. Technical success in the Ship-to-WIPP project included Carisbad Area Office (CAO) approval of the disposal plan, completion of over 60 operating procedures, startup of the Gas Analysis Trailer, and movement of all large containers from Pad 4.

Progress was made toward reducing the volume of low-level waste requiring vault disposal with the successful startup and operation of the Waste Segregation Facility and excellent management and cost control on the Drum Compactor Project. More aggressive attention to waste characterization and certification was evident, although implementation of the program by several WSRC operating divisions still needs improvement.

The maturity of the WSRC Pollution Prevention Program was verified by recognition from DOE-Headquarters for "P2-in-Design" and Enhanced Work Planning and excellent performance leading the DOE "P2-in-Design" program resulted in additional funding during the period. During the next period WSRC is expected to improve its documentation of waste minimization/pollution prevention cost savings.

ENVIRONMENTAL RESTORATION

The overall performance of WSRC in this area exceeded expectations as defined in the AOP. During the period, WSRC effectively managed 34 remediation projects, achieved regulatory success, deployed 10 new cleanup technologies, and completed all remediation work without a lost-time accident. A/M and TNX Area Groundwater Remediation Projects are 28% and 33% ahead of goal, respectively. Over 65% of available funds were allocated to remediation activities, resulting in significant progress on 15 in-field projects. The 10 new technologies deployed during Period 5 exceeded a DOE goal of five. WSRC supported Environmental Management Program Integration (EMI) and ER Program Area Integration Team (ER-PAIT) activities well.

Most enforceable agreement milestones were completed on or ahead of schedule, although eight enforceable milestones are being extended and regulatory officials consider four additional milestones in the Integrator Operable Unit program missed. The solution to this informal dispute requires improved document quality, a concern identified by DOE at the conclusion of Period 4. While the WSRC "Safety Works" Campaign appeared to improve radiological work control, operations, and overall safety, a WSRC Facility Evaluation Board (FEB) assessment identified deficiencies warranting improvement in both fieldwork practices and responses to FEB and DOE observations. Cost performance declined since last period, with examples of WSRC overrunning cost estimates. While efforts to avoid unnecessary cost, such as reaching an innovative solution to the A01 Outfall issue, reflects a commitment to cost effective operation, environmental restoration program productivity enhancements have not, in general, materialized as in previous periods which has resulted in adverse program impact.

Continued success in environmental restoration is significantly dependent upon assuring the F-Arca Water Treatment Unit operates reliably and productivity enhancements are realized.

TRITIUM

The overall performance of the WSRC tritium program exceeded expectations, with all product shipments to the Department of Defense being met on schedule and within budget. Although two performance measures associated with industrial safety showed a negative trend early in the period, performance rebounded for the remainder of the period as a result of timely management attention to corrective actions. The Defense Programs senior management assumed a very important leadership role within the Weapons Production Complex for strategic planning and cost effectiveness, applying this role across the complex to assist in the implementation of integrated safety management, conduct of operations, and project management. Achievements also included exemplary Y2K performance; recognition from DNFSB for the defense-in-depth approach used in the Consolidated Tritium Facilities Safety Analysis Report; recognition from

the Albuquerque Operations Office for leadership in Defense Programs strategic integration, approval of an innovative precision unloading technique to supplement function testing in reservoir surveillance; and approval for a second reclamation on the SP800 reservoir. The Tritium radiological protection staff also teamed with operations to re-engineer its Finishing Line process; resulting in significantly improved contamination control.

In January 1999, tritium construction completed one year of work without a first aid case or recordable injury. Also, the Tritium Facilities Consolidation and Modernization Project team resolved project issues by identifying scope adjustments to stay within the total project cost while meeting all original functional requirements for the project.

Relative the Acceleration Production of Tritium Project, WSRC provided increasing support to Los Alamos National Laboratory and Burns & Roe Enterprises, Inc. (BREL) in terms of design evolution and programmatic support. WSRC provided excellent service in a proactive manner in the areas of ES&H and QA during the review period. Critical support was also provided in the Low Energy Demonstration Accelerator (LEDA) startup activities by leading the successful move of the injector, supporting assembly and tuning of the Radio Frequency Quadrapole, assisting in testing of power supplies, and providing valuable assistance for the LEDA Readiness Assessment. Following the December 22, 1998, Secretarial decision on Tritium Source, WSRC performed extremely well in managing a significant down-scoping of the project and offering assistance to BREL in placing affected individuals in positions at SRS.

OPERATIONAL SUPPORT PROGRAMS

Operational Support Programs cover a wide range of WSRC activities needed to assure sound management and integration of the Site's operating activities. These programs include: Scientific & Laboratory Programs; Environment, Safety & Health Programs; Financial Programs/Planning Integration; Legal functions; Business & Community Programs; Technical Services; Engineering & Construction; Administration & Inflastructure; Human Resources, EEO & Diversity; Public Affairs; and Facility Disposition functions. Overall, WSRC exceeded expectations during this period, though in certain functional areas, performance needs to be improved.

Areas reflecting positive performance with few deficiencies and significant accomplishments include:

- completion of Y2K mission essential system apprades at SRTC and sensitive Human Resources systems ahead of schedule, as well as obtaining external (Gartner Group) validation of the completeness and rigor of the Y2K Delivery Assurance/Compliance Verification program;
- receiving accreditation for the Fire Department from the International Fire Service Accreditation Congress;
- redesigning and implementing a new, improved Bioassay Program scheduling system and sample collection process;
- improving and institutionalizing throughout the site the Integrated Safety Management System (ISMS)

- successfully relocating the point-of-compliance for the A01 Outfall in order to more cost effectively comply with the permit;
- continuing the outstanding record of safety performance for construction programs, including external recognition by the National Erectors Association;
- improving financial management as demonstrated by development of a simplified indirect cost allocation process and improving systems related to support of estimates for environmental clean-up liabilities;
- establishing and implementing cost saving procurement initiatives such as Energy Savings Performance subcontracts and award of strategic agreements for calibration services; and
- developing innovative, cost effective approaches to management of legal suits.

In the area of project management, concerns raised in the past Award Fee Period are being addressed through the Project Management Improvement Plan and have resulted in improved performance at the institutional level. SR expects to see further improvements in the implementation of projects as the new/revised practices become more engrained throughout the organization over time.

In the area of strategic budget formulation and resource and skill improvement and planning, there were examples during this evaluation period that point to the need for improvement and a greater appreciation and sensitivity by WSRC. This includes development of proposals that have not been fully analyzed or properly characterized prior to their dissemination. Specific examples include the issues that transpired relative to FY 2000 budget development concerning DWPF canister rate production, and preliminary assessments of workforce skills mix needs that changed after a more thorough analysis.

Finally, in site training and property management programs, a need exists to improve sitewide management/integration and cost effectiveness.

FOCUS AREAS

Based on my assessment of integrated performance across the five Site Focus Areas, I have further validated that the results of evaluation of AOP performance and associated for determination are appropriate. Results of the focus areas assessment which were not previously addressed in the AOP assessment include:

In the focus area of safety, WSRC continued to demonstrate a very strong commitment to safety with excellent illness and injury rates in both operations and construction; improvement in the quality and timeliness of safety documentation; and strengthened safeguards and security programs through improved effectiveness in setting priorities and responding to change.

Additional attention is considered to be needed for controlling contamination and increasing the effectiveness of RADCON personnel in supporting operations in work control, consistency and discipline of industrial hygiene implementation among facilities, and improving fire protection system testing and maintenance practices. To this end, line management is responsible for the functionality of those systems, and accordingly, should be responsible to assure adequacy of the testing and maintenance practices that provide for functionality.

In the focus area of technical capability and performance, a negative trend was observed in conduct of operations particularly in the area of procedure compliance. While no accidents occurred, and, for the most part, WSRC responded properly to the procedural violations associated with this trend, I consider more DOE intervention than should have been necessary was required, particularly in the Spent Fuel Program. I also consider your sitewide approach to resolving this concern (Reference your letter to DOE-SR, S. Johnson to L. Sjostrom dated April 29, 1999 and discussions in joint WSRC/DOE senior management forums) demonstrates management awareness of and commitment to correcting this condition. Such efforts establish a framework to help achieve resolution. Success, however, must be demonstrated through actual and sustained reversal of this trend of incidents. This requires continued and visible management attention.

WSRC personnel and programs received numerous awards this period further demonstrating the strong technical capabilities residing within the Site. Specific examples include the receipt of two Hammer Awards, an ASME Fellow Award, a CNTA Distinguished Scientist Award, International Accreditation of the Fire Department training program, 2 Patents, 59 Invention/copyright Disclosures, and 2 Commercial License Agreements for processes developed.

Regarding the focus area of community, state and regulator relationships, various evaluations and independent inspections indicated the presence of a strong environmental protection program and effective interface with the South Carolina Department of Health and Environmental Control and the Environmental Protection Agency. Additionally, effective relationships with the DNFSB were maintained. Also, WSRC continued to provide very good support to an increased level of SRS Citizens Advisory Board activities this period and continued to display responsiveness and trustworthiness in its dealing with the public. WSRC supported surrounding communities by providing assistance at a tire company fire, donating computers to local schools, and providing equipment to the Barnwell County Industrial Park. Public perception about SRS operations is considered good, one notable example involving public print and broadcast media confidence in SRS' ability to safely perform the future MOX mission was evident. Improvement was noticed in WSRC communications with congressional, intergovernmental, and local officials.

In the focus area of cost effectiveness, WSRC demonstrated continued improvement in cost effective performance throughout most areas of the Site. There is, however, still a need to continue to focus on existing PACE initiatives and determine additional opportunities to achieve the PACE goal of \$30 million in savings by September 30, 1999.

Additionally, project management has made significant improvement over Period 4 with the implementation of the Project Management Improvement Plan, including institutional improvements in technical and programmatic risk management. Completion of detailed risk assessments and associated mirigation plans on zo projects, such as the Americium/Curium Project Risk and Mitigation Plan, was a notable achievement. Schedule performance has improved with the K-Area Material Storage (KAMS) and Upgrade Canyon Exhaust projects maintaining an accelerated schedule. The Tritium Extraction Facility project performance has been outstanding and has set an example in the DOE Complex with the incorporation of ISM principles.

In the focus area of corporate perspective, WSRC actively demonstrated a corporate perspective and supported DOE-Headquarters and other DOE field sites. Notable examples include technical support on the Hanford Tank Waste Remediation System, engineering support to West Valley on tank cleaning activities, and technical assistance to Oak Ridge National Laboratory (ORNL) associated with digital radiography for imaging U233 Bearing Canisters.

DOE Lead Evaluators will be discussing their evaluations in detail with their respective WSRC counterparts. Thank you for your efforts and commitment to safety and continuous improvement in the operation of the Savannah River Site.

Sincerely,

Greg Rudy Manager

SB-99-108

cc w/encl. I J. Bussy, WSRC